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PATENT APPLN. NO. 10/761,806
RESPONSE UNDER 37 C.F.R. §1.111

PATENT
NON-FINAL

IN THE CLAIMS:

1. (currently amended) A thrombus suction catheter comprising a flexible plastic tube having a first lumen passing through from a proximal end to a distal end of the catheter,

an opening at the distal end of the catheter,

an insertion port for a guidewire provided in the catheter at a position apart from the distal end of the catheter, and

a second lumen provided for the guidewire and extending from the insertion port to the opening at the distal end of the catheter,

wherein the opening at the distal end of the catheter comprises a cut surface angled with respect to the axis of the catheter, the cut surface terminating in a necked-down tip in an axial direction at a distal side of the cut surface, ~~and at least a portion of the cut surface on a proximal side of the cut surface being concave in the angled direction,~~ and the necked-down tip including the second lumen provided for the guidewire, and the cut surface including a first cut surface extending from a proximal side of the neck-down tip and angled in the proximal direction of the catheter, a ledge surface which is substantially parallel to the longitudinal axis of the catheter and extends from the first cut surface in the proximal direction and a second concave cut

surface extending from the ledge surface and angled in the proximal direction of the catheter;

whereby the thrombus catheter is provided with improved suction, reaching ability and passage in a body to a lesion portion in a coronary artery.

2. (canceled)

3. (previously presented) The thrombus suction catheter according to claim 1, wherein the necked-down tip is eccentric to the longitudinal axis of the catheter.

4. (canceled)

5. (original) The thrombus suction catheter according to claim 1, wherein the opening at the distal end of the catheter provides a pressure loss at a start of suction of 90% or less.

6. (canceled)

7. (previously presented) The thrombus suction catheter according to claim 21, further comprising a reinforcing wire in said third lumen.

8 - 10. (canceled)

11. (original) The thrombus suction catheter according to claim 1, wherein the insertion port for the guide wire is provided at a position 25 to 35 cm from the distal end of the opening at the distal end of the catheter.

12. (canceled)

13. (original) The thrombus suction catheter according to claim 3, wherein the insertion port for the guide wire is provided at a position 25 to 35 cm from the distal end of the opening at the distal end of the catheter.

14. (canceled)

15. (original) The thrombus suction catheter according to claim 1, wherein a marker for identifying a position of the catheter is provided in a vicinity of the distal end opening.

16. (canceled)

17. (original) A thrombus suction system comprising a suction pump and the thrombus suction catheter of claim 1, wherein the suction pump provides a variable and continuous pressure at the proximal end of the thrombus suction catheter.

18. (canceled)

19. (original) The thrombus suction system according to claim 17, wherein the suction pump is capable of producing a suction pressure of 650 mmHg or higher at the proximal end of the thrombus suction catheter.

20. (canceled)

21. (previously presented) A thrombus suction catheter according to claim 1, further comprising a third lumen provided for

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a reinforcing wire and extending from the proximal end of the catheter to a position beyond said insertion port and to a position apart from the distal end of the catheter.

22. (canceled)